



## FISHERIES RESOURCE MANAGEMENT

P. O. Box 151 TOPPENISH, WA 98948 509-865-6262 FAX: 509-865-6293

# Request for Proposals for– Ground Water Pump Test and Piezometer Well Installations for the Yakama Nation

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### *Yakama Nation Upper Columbia Habitat Restoration Project*

## **Introduction**

Yakama Nation Department of Fisheries, Upper Columbia Habitat Restoration Project (UCHRP) is soliciting bids for a two year contract for the services of conducting groundwater pump tests and installation of piezometer wells. This contract will assist the UCHRP project requirements in the Wenatchee, Entiat and Methow Sub-basins. The contract will involve digging test pits to determine substrate horizons as well as the installation of piezometer test wells to determine groundwater recharge rates. All work under this contract will be directed by one of the Yakama Nation's Designated Representatives, including Brandon Rogers, Chris Clemons, Jason Breidert, Matt Wilberding, Hans Smith, Jarred Johnson or Chris Butler. All completed bids received under this RFP are expected to address all tasks identified below in the scope of work for the full two years of the Ground Water Pump Test and Piezometer Well Installation contract.

## **Objective**

This contract entails conducting groundwater pump tests by digging test pits and installing piezometer wells for monitoring groundwater discharge rates. The contractor will be required to submit a line item budget for the tasks and specifications outlined below. The required services will be on an as needed basis by the Yakama Nation's Upper Columbia Habitat Restoration Program (UCHRP). The location of such services will be at various proposed project sites located in and around the Wenatchee, Entiat and Methow Watersheds. The Contractor will be responsible for providing all equipment and personnel necessary to conduct the tasks as outlined below.

## Scope of Work

### Project Specifications Groundwater Pump Tests:

- Test pits will be dug a linear feature that mimics a 'unit length' of side channel. The pump tests require linear trenches so that an idea of discharge/foot for different water surface equilibrium levels can be obtained.
- All test pits will be dug per site specific specifications given to the Contractor prior to commencement. As a general rule all test pits will be approximately 10 to 20 feet long and 5-8 feet deep, all dependent on the groundwater elevation. The bottom width of each trench will be kept to a minimum, but due to sloughing, a trench cut into the alluvium will typically be at least 6 feet across the bottom. If possible, the trench length should be at least 5 times the bottom width.
- The tracks of the excavator will be heavy gauge rubber instead of the traditional steel to minimize ground disturbance impacts. (The proposed type of equipment to be used should be a 30,000 lb piece of equipment or less).
- The excavated materials will be temporarily placed adjacent to each pit. Subsurface material and grading will be noted. Static water surface will then be surveyed in each test pit. To complete the pump test a pump will be used to lower the level of water in each trench. Once the lowered level becomes static, the volume of water pumped over a set time period to maintain the lower water level will be measured. The static water surface elevation associated with the pump volume will then be surveyed.
- At the completion of the pump tests each test pit and pump test location will be filled and contoured to pre-existing conditions. Initially vegetation will be stripped and sorted for native and non-native materials. Non-native materials will go back into the holes first so that it will be buried deeply. Native vegetation will be buried on top so that it will have a chance to come back first.
- All test pits and pump test locations will be sited prior to construction by the designated project supervisor and project engineer to reduce vegetative disturbance.
- Contractor will need to provide any and all necessary hand and power tools to accomplish tasks as described for both project elements.

### Project Specifications Piezometer Wells:

- The total number of piezometer wells installed will be determined on a project specific basis by the project supervisor and project engineer at mutually agreed upon locations to minimize ground and vegetation disturbance.
- The well lining will be made up of 3 to 6 inch diameter schedule 40 PVC pipe with a capped glued bottom and threaded cap for the top. The bottom 3 feet of pipe will have around 60 evenly spaced  $\frac{1}{4}$  inch holes and one through the bottom of the glued cap.

- Geo -textile fabric will be wrapped around the bottom of the pipe to keep sand out while the pipe is being installed.
- A rubber tracked excavator will be used to dig a hole down to the necessary sub-surface elevation in install each pipe, (site conditions may require that the hole be dug by hand).
- The pipe will be placed in a vertical position in the excavated hole, and then the sorted excavated material will be refilled in the hole around the pipe and contoured to pre-existing conditions.

## Limitations

The Yakama Nation reserves the right to accept or reject any and all of the proposals received as a result of this request, or to cancel in part or entirely this request if it is in the best interest of the Yakama Nation to do so. This request does not commit the Yakama Nation to pay any costs incurred in the preparation of a proposal.

## Proposal Requirements:

Selected proposal will have and demonstrate the following:

- All proposals must complete pages 4 and 5.
- All proposals must provide a list and pictures of the required equipment to accomplish the identified tasks above.

## Proposal Submittals:

Proposals will only be accepted at the Toppenish Office, and must be submitted by close of business (5:00 p.m.) Wednesday June 1, 2016.

**Proposals must be valid for 90 days thereafter the submitted closing date.**

## Submit the proposal to:

**Yakama Nation Fisheries  
Attn: Jackie Olney (LWD)  
PO Box 151  
Toppenish, WA 98948**

**FedEx Delivery:**  
401 Fort Rd  
Toppenish, WA 98948  
[olnj@yakamafish-nsn.gov](mailto:olnj@yakamafish-nsn.gov)

**Questions should be  
directed to:**

**Chris Butler**  
UCHRP Habitat Fisheries Biologist  
509-996-5005 ext. 2  
[butlerc@yakamafish-nsn.gov](mailto:butlerc@yakamafish-nsn.gov)

# Ground Water Pump Test and Piezometer Well Installations Proposal Form

Contractor Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, Zip \_\_\_\_\_

Phone and Email: \_\_\_\_\_

Item #	Work Description	Bid Cost
1	Mobilization Wenatchee Watershed includes equipment for groundwater pump tests and piezometer wells per site basis	
2	Mobilization Entiat Watershed includes equipment for groundwater pump tests and piezometer wells per site basis	
3	Mobilization Methow Watershed includes equipment for groundwater pump tests and piezometer wells per site basis	
4	Geo-textile <del>Fabric to line hole for</del> PVC Tubing of piezometer wells per unit	
5	PVC materials to construct piezometer wells per linear foot	
6	De-watering pumps to remove standing water from test pits per daily rate (5 h.p. trash pump)	
7	Site prepping & clean-up respectively per acre	
8	Excavation/Equipment Time per hour	

\* Note, please add any additional items if needed below.

# **Owned Equipment List**

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